10/577,584

=> d ibib abs hitstr 1-8

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:677615 CAPLUS

DOCUMENT NUMBER:

145:117392

TITLE:

Drug combination therapy and pharmaceutical

compositions using CCR2 antagonists and statins for

treating inflammatory disorders

INVENTOR(S):

Forrest, Michael J.; Demartino, Julie A.; Flicker,

Michele R.; Melian, Augustin; Kanwar, Samina; Romano,

Gary J.

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

Endin

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIND DATE		APPLICATION NO.						DATE				
	_	2006									WO 2	006-	US25	3		2	00,60	105
	WO	2006						2007										
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
			KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
								•				TT,				•	•	•
			-			ZM,	•	•	•	•	•	•	•	•	•	-	•	- •
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
								-			-	RO,		•	•	•		•
			CF;	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
								TM,								-		
	ΑU	2006	2040	38		A1		2006	0713		AU 2	006-	2040	38		20	0060	105
	CA	2593	545			A1		2006	0713		CA 2	006-	2593	545		2.0	0060	105
	IN	2007	CN02	529		Α		2007	0907		IN 2	007-	CN25	29		20	0070	512
PRIO	PRIORITY APPLN. INFO.:										US 2	005-	6417	07P				
										•	WO 2	006-1	JS25	3	1	אב א	060	105
	_				_					-				_		_		

AB A combination of a CCR2 antagonist and a statin is useful in the treatment and or prevention of inflammatory and other disorders, and methods of treating inflammatory and other disorders using a combination of a CCR2 antagonist and a statin.

IT 624733-88-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(CCR2 antagonist-statin combination for treating inflammatory disorders)

RN 624733-88-6 CAPLUS

ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:121960 CAPLUS

DOCUMENT NUMBER:

144:212759

TITLE:

Preparation of tetrahydropyranylaminocyclopentylcarbon

yltetrahydropyridopyridines as modulators of CCR2

chemokine receptor activity.

INVENTOR(S):

Demartino, Julie; Akiyama, Taro; Struthers, Mary; Yang, Lihu; Berger, Joel P.; Morriello, Gregori; Pastemak, Alexander; Zhou, Changyou; Mills, Sander G.; Butora, Gabor; Kothandaraman, Shankaran; Guiadeen, Deodialsingh; Tang, Cheng; Jiao, Richard; Goble,

Stephen D.; Moyes, Christopher

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 84 pp., Cont.-in-part of Ser.

No. US 2004-923594, filed on 20 Aug 2004

whichCont.-in-pa CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006030582	A1	20060209	US 2005-102417	20050408
US 2004167156	A1	20040826	US 2003-425167	20030429
US 6812234	B2	20041102		
US 2005107422	A1	20050519	US 2004-923594	20040820
US 7230008	B2	20070612		
EP 1627636	A1	20060222	EP 2005-270011	20050418
R: AT, BE, CH,	DE, DK	E, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
	-	, RO, MK,	CY, AL, TR, BG, CZ,	EE, HU, PL, SK,
BA, HR, IS,	YU			
PRIORITY APPLN. INFO.:			US 2002-376180P	P 20020429
			US 2003-425167	A2 20030429
			US 2004-923594	A2 20040820
			US 2002-376291P	P 20020429
			US 2005-102417	A 20050408

OTHER SOURCE(S):

MARPAT 144:212759

GI

AB Title compds. [I; X = O, NR20, S, SO, SO2, CR21R22, NSO2R20, NCOR20, CO, etc.; R20 = H, (substituted) alkyl, Ph, PhCH2, cycloalkyl; R21, R22 = H, OH, (substituted) alkyl, alkoxy, Ph, PhCH2, cycloalkyl; R1 = (substituted) alkyl, alkoxyalkyl, alkylthioalkyl, heterocyclyl, cyano, Ph, CO2R20, NHCOR20, etc.; R2 = H, OH, halo, CO2R20, (substituted) alkyl, etc.; R3 = O, null; R4 = H, alkyl, CF3, OCF3, Cl, F, Br, Ph; R5 = (substituted) alkyl, alkoxy, alkylcarbonyl, Ph, PhO, pyridyl, CO2R20, etc.; R6 = H, alkyl, CF3, F, Cl, Br; R7 = H, (substituted) alkyl; R8 = H, F, OH, cycloalkyloxy, (substituted) alkyl, CO2R20, etc.; R9 = H, OH, (substituted) alkyl, alkoxy, CO2R20; R8R9 = atoms to form a 3-6 membered ring; R10 = H, F, cycloalkoxy, (substituted) alkyl; R8R10 = atoms to form a 6-8 membered ring; n = 0-2; dashed line = optional double bond], were prepared Thus, title compound (II) was prepared in many steps. I generally showed IC50 values of <1 μM in a CCR-2 receptor binding assay.</pre>
IT 625097-14-5P 625097-40-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(preparation\ of\ tetrahydropyranylaminocyclopentylcarbonyltetrahydropyridop$

RN 625097-14-5 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

CRN 64-19-7 CMF C2 H4 O2

RN 875925-16-9 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, propanoate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 625097-14-5 CMF C24 H34 F3 N3 O3

Absolute stereochemistry.

CM 2

CRN 79-09-4 CMF C3 H6 O2

```
10/577,584
```

CRN 625097-14-5

CMF C24 H34 F3 N3 O3

Absolute stereochemistry.

CM 2

CRN 110-15-6 CMF C4 H6 O4

 $HO_2C-CH_2-CH_2-CO_2H$

RN 875925-18-1 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, hydroxyacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 625097-14-5 CMF C24 H34 F3 N3 O3

CRN 64-19-7 CMF C2 H4 O2

RN 875925-47-6 CAPLUS

CM 1

CRN 624733-88-6

CMF C24 H34 F3 N3 O3

Absolute stereochemistry.

CM 2

CRN 79-09-4 CMF C3 H6 O2

RN 875925-48-7 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, butanedioate (salt) (9CI) (CA INDEX NAME)

CRN 624733-88-6

CMF C24 H34 F3 N3 O3

Absolute stereochemistry.

CM 2

CRN 110-15-6 CMF C4 H6 O4

 $HO_2C-CH_2-CH_2-CO_2H$

RN 875925-49-8 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, hydroxyacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 624733-88-6 CMF C24 H34 F3 N3 O3

CRN 107-36-8 CMF C2 H6 O4 S

HO-CH2-CH2-SO3H

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:431408 CAPLUS

DOCUMENT NUMBER:

142:482030

TITLE:

Tetrahydropyranyl cyclopentyl tetrahydropyridopyridine

modulators of chemokine receptor activity

INVENTOR(S):

Jiao, Richard; Butora, Gabor; Goble, Stephen D.; Guiadeen, Deodialsingh; Mills, Sander G.; Morriello, Gregori; Pasternak, Alexander; Tang, Cheng; Yang, Lihu; Zhou, Changyou; Kothandaraman, Shankaran; Moyes,

Christopher

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 86 pp., Cont.-in-part of U.S.

Ser. No. 425,167.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

Endin

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE .
US 2005107422 US 7230008	A1 B2	20050519	US 2004-923594	20040820
US 2004167156 US 6812234	A1 B2	20070812 20040826 20041102	US 2003-425167	20030429
US 2006030582	A1	20060209	US 2005-102417	20050408
EP 1627636 R: AT, BE, CH,		• •	EP 2005-270011 , GR, IT, LI, LU,	
BA, HR, IS,		RO, MK, CY	, AL, TR, BG, CZ,	
PRIORITY APPLN. INFO.:			US 2002-376180P US 2002-376291P	P 20020429 P 20020429
			US 2003-425167 US 2004-923594	A2 20030429 A2 20040820
			US 2005-102417	A 20050408

OTHER SOURCE(S):

MARPAT 142:482030

GI

The present invention is directed to methods for treating, preventing, ameliorating, controlling or reducing the risk of an inflammatory or immunoregulatory disorder or disease, which method comprises the administration to a patient of an effective amount of the title compds. which are useful as modulators of chemokine receptor activity. In particular, these compds. are useful as modulators of the chemokine receptor CCR-2. E.g., I was prepared by reaction of the synthesized intermediate II with tetrahydro-4H-pyran-4-one in the presence of Na triacetoxyborohydride.

IT 625097-14-5P 625097-40-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (tetrahydropyranyl cyclopentyl tetrahydropyridopyridine modulators of chemokine receptor activity)

RN 625097-14-5 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 625097-40-7 CAPLUS

CN Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS COPYRIGHT 2007 ACS on STN ANSWER 4 OF 8

ACCESSION NUMBER: 2005:426567 CAPLUS

DOCUMENT NUMBER: 142:482029

TITLE: Preparation of [(1R,3S)-3-isopropyl-3-[[3-

(trifluoromethyl) -7,8-dihydro-1,6-naphthyridin-6(5H) yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2

antagonist

INVENTOR(S):

Cai, Dongwei; Fleitz, Fred; Ge, Min; Hoerrner, Scott; Javadi, Gary; Jensen, Mark; Larsen, Robert; Li, Wenjie; Nelson, Dorian; Szumigala, Elizabeth; Yang,

Lihu; Zhou, Changyou

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE				1	APPL	ICAT:		DATE				
WO	2005	0447	95		A1	- :	2005	 0519	1	WO 2	004-1	US35	294		2	0041	025
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JΡ,	KE,	KG,	KP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
_	2004				A1	:	2005	0519	1	AU 2	004-2	2878	10		2	0041	025
CA	2543	250			A1	:	2005	0519	(CA 2	004-2	2543	250		2	0041	025
ΕP	1682	500			A1	:	2006	0726]	EP 2	004-	7963	05		2	0041	025

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
                               20070109
                                           BR 2004-15862
    BR 2004015862
                                                                  20041025
                         Α
                                           JP 2006-538149
    JP 2007509944
                         T
                               20070419
                                                                  20041025
                               20070629
                                           IN 2006-DN2137
                                                                  20060419
    IN 2006DN02137
                         Α
                                           US 2006-577587
    US 2007135475
                         A1
                               20070614
                                                                  20060427
                                                               P 20031027
                                           US 2003-514754P
PRIORITY APPLN. INFO.:
                                                               W 20041025
                                           WO 2004-US35294
                      CASREACT 142:482029; MARPAT 142:482029
OTHER SOURCE(S):
GI
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The present invention provides an efficient synthesis for the preparation of [(1R,3S)-3-isopropyl-3-[[3-(trifluoromethyl)-7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4yl]amine (I) and its succinate salt. The present invention addnl. provides an efficient syntheses for the preparation of intermediates, i.e. (3R)-3-methoxytetrahydro-4H-pyran-4-one (II), (1S,4S)-4-(2,5-dimethyl-1Hpyrrol-1-yl)-1-isopropylcyclopent-2-ene-1-carboxylic acid (III), and 3-(trifluoromethyl)-5,6,7,8-tetrahydro-1,6-naphthyridine (IV), and for the preparation of the precursor (3S,4S)-N-((1S,4S)-4-isopropyl-4-[[3-(trifluoromethyl) -7,8-dihydro-1,6-naphthyridin-6(5H)-yl]carbonyl]cyclopent-2-en-1-yl)-3-methoxytetrahydro-2H-pyran-4-amine (V). The invention addnl. resides in the superior properties of the I succinate. Thus, 730 g III was treated with 228 mL methanesulfonyl chloride in the presence of 0.93 L diisopropylethylamine in 6.6 L THF at 0-13°, stirred at room temperature for 4 h, cooled to .apprx.15°, treated with IV.HCl, warmed to 23°, treated with 0.93 L diisopropylethylamine with cooling at .apprx.25° over 15 min, and aged for .apprx.1 h to give 1.055 kg the compound (VI). VI (1.055 kg) in MeOH was added to 1 kg hydroxylamine hydrochloride, 50% aqueous hydroxylamine (1 L), and 5 L H2O, and the resulting slurry was refluxed at 71° for 6 h to give, after treatment with anhydrous HCl in isopropanol, the amine dihydrochloride (VII) (0.76 kg). VII (777 g) was slurried in 3 L iso-Pr acetate and the mixture was cooled in an ice bath, successively treated with 860 mL n-Bu3N, 260 mL isopropanol, and sodium triacetoxyborohydride (724 g, at 5°), and after 1 h, treated with a solution of II in iso-Pr acetate (1.76 L of a 160 g/L solution), and allowed to react for 6 h to give 654 g crude V (90%). V (640 g) was diluted with 6.4 L MeOH, charged to an autoclave, treated with a slurry of 256 g 5% Pd-C in 5.0 L MeOH, and hydrogenated under H pressure of 40 psi at 25° overnight to give a solution of 633 g I in MeOH (98.5%) which was concentrated to an oil (770 g). The oil was dissolved in 3.1 L iso-Pr acetate and the solution was concentrated to a brown oil. Dilution with iso-Pr acetate and

concentration was repeated two addnl. times. The resulting oil was converted into I benzenesulfonate (1.645 kg) by treating with 283 g benzenesulfonic acid in iso-Pr acetate and treatment with heptane and the resulting benzenesulfonate salt was treated with a mixture of K2CO3, H2O, and iso-Pr acetate to give an oil containing 1.16 kg I. The latter oil was treated with 294 g succinic acid in ethanol and heptane to give 1.328 kg I succinate. 624733-88-6P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of

TT

98-11-3 CRN CMF C6 H6 O3 S

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:426431 CAPLUS

DOCUMENT NUMBER:

142:482028

TITLE:

Preparation of [(1R,3S)-3-isopropyl-3-[[3-

(trifluoromethyl) -7,8-dihydro-1,6-naphthyridin-6(5H) yl]carbonyl]cyclopentyl][(3S,4S)-3-methoxytetrahydro-2H-pyran-4-yl]amine salt as chemokine receptor CCR-2

antagonist

Jensen, Mark; Larsen, Robert; Sidler, Daniel Richard INVENTOR(S):

PATENT ASSIGNEE(S): Merck & Co., Inc., USA PCT Int. Appl., 28 pp. SOURCE:

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE							DATE					
	2005															0041	025
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	ΜŻ,	NA,	SD,	SL,	SZ,	TZ,	ŬĠ,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	.TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
•		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,
			TD,														•
	2004																
	2543						2005	0519	1	CA 2	004-	2543	201		2	0041	025
EP	1682						2006								_	0041	
	R:						ES,										
							RO,						•	•	•		
CN	1870	998			Α		2006										
BR	2004	01583	36		A		2007										
	2007						2007										
	2006						2007				006-1					0060	
	2006						2006				006-						
	2007						2007									-	
	NO 2006002377				Α		2006	0524								0060	
PRIORITY APPLN. INFO.:											003-				-	0031	
						1	WO 2	004-1	JS35	069	1	<i>N</i> 2	0041	025			

OTHER SOURCE(S):

CASREACT 142:482028

10/577,584

CM 2

CRN 110-15-6 CMF C4 H6 O4

 $HO_2C-CH_2-CH_2-CO_2H$

RN 851916-43-3 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl-, monobenzenesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 624733-88-6 CMF C24 H34 F3 N3 O3

Absolute stereochemistry.

CM 2

CRN 98-11-3 CMF C6 H6 O3 S

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:1124588 CAPLUS

DOCUMENT NUMBER:

142:69197

TITLE:

CCR-2 antagonists for treatment of neuropathic pain

INVENTOR(S): Abbadie, Catherine; Lindia, Jill Ann; Wang, Hao

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 304 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIN	D :	DATE		i	APPL	ICAT	ion i	NO.					
							- .									-			
	WO	2004	1103	76		A2		2004	1223	1	WO 2	004-1	US17	499		20040602			
	WO	2004	1103	76		A3		2005	0224										
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			TJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
			ΑZ,	BY,	KG,	ΚŹ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	
			SN,	TD,	TG														
	US	2006	2057	61		A1		2006	0914	1	US 2	005-	5597	01		2	0051	206	
PRIO	RIT	APP	LN.	INFO	. :					1	US 2	003-	4763	91P	:	P 2	0030	606	
										1	US 2	003-	5316	37P		P 2	0031	222	
										1	WO 2	004-1	US17	499	1	W 2	0040	602	
										_									

OTHER SOURCE(S): MARPAT 142:69197

AB The invention is directed to methods of treating neuropathic pain and other neuropathic diseases and conditions with CCR-2 antagonists and pharmaceutical composition containing CCR-2 antagonists.

IT 624733-87-5

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(CCR2 antagonists for treatment of neuropathic pain)

RN 624733-87-5 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-O-methyl- (9CI) (CA INDEX NAME)

ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

2003:892775 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

139:381471

TITLE:

Preparation of tetrahydropyranyl cyclopentyl

tetrahydropyridopyridines as modulators of chemokine

receptor activity

INVENTOR(S):

Jiao, Richard; Morriello, Gregori; Yang, Lihu; Moyes,

Christopher

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA; Merck Sharp & Dohme Limited PCT Int. Appl., 52 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.							APPLICATION NO.						DATE					
							•									-			
WC	2003						2003										20030		
	W :	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BE	3, BG	, B	R,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	C, EF), E	S,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE	E, KG	, K	R,	ΚZ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MV	KM , I	, M	Z,	NI,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SI	c, si	, T	J,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZN	1, ZW	1							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, T2	, U	З,	ZM',	ZW,	AM,	AZ,	BY,	
							TM,												
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC	, NI	, P'	r,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GÇ	, GW	, M	L,	MR,	NE,	SN,	TD,	TG	
TW	2620	77 [.]			В	•	2006	0921	·	TW	2003	-92	109	9364		2	0030	422	
AU	2003	2342	51		A1		2003	1117		AU	2003	-23	425	51		2	20030	425	
BR	2003	0096	50		Α		2005	BR 2003-9650						20030425					
	1662				Α		2005	0831	CN 2003-815041								425		
	2285				C2		2006				2004						20030	425	
US	2005	1016	28		A1		2005	0512		US	2004	-85	60:	12		2	20040	528	
	2004						2007				2004						0041		
	2004						2005				2004						0041		
			-				2004				2004						20041		
NO 2004005235 PRIORITY APPLN. INFO.:											2002						20020		
PRIORITI APPEN. INTO											2003						20030	_	
OTHER SOURCE(S):					MAR	PAT	139:	3814	71	,,,	2000	. 55.				., 2	.0050		

I

OTHER SOURCE(S):

MARPAT 139:381471

GI

AB Title compds. I (R1 = H, F, OH, alkoxy, or alkyl optionally substituted with 1-6 fluoro atoms; R2 = O or absent) and their pharmaceutically acceptable salts are prepared and disclosed as modulators of chemokine receptor activity. Thus, II was prepared by condensation of tetrahydro-4H-pyran-4-one with the corresponding aminocyclopentane precursor (preparation given). In particular, these compds. are useful as modulators of the chemokine receptor CCR-2. I was found generally to possess an IC50 value of less than about 1 μ M in binding to the CCR-2 receptor in performed assays.

IT 624733-87-5P 624733-88-6P 624733-89-7P 624733-90-0P 624734-12-9P 624734-13-0P 624734-14-1P 624734-15-2P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity)

RN 624733-87-5 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-0-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 624733-88-6 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

RN 624734-12-9 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-3,4-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-2-0-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 624734-13-0 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-1-oxido-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:892537 CAPLUS

DOCUMENT NUMBER: 139:381470

TITLE: Preparation of tetrahydropyranyl cyclopentyl

tetrahydropyridopyridine as modulators of chemokine

receptor activity

INVENTOR(S): Jiao, Richard; Morriello, Gregori; Yang, Lihu; Goble,

Stephen D.; Mills, Sander G.; Pasternak, Alexander;

Zhou, Changyou; Butora, Gabor; Kothandaraman,

Shankaran; Guiadeen, Deodialsingh; Tang, Cheng; Moyes,

Christopher

PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Merck Sharp & Dohme Limited

SOURCE: PCT Int. Appl., 207 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

	PATENT NO.				KIND		DATE		APPLICATION NO.									
						-				:								
WO	2003	09258	36		A2		2003	1113	1	WO 20	003-t	JS129	929		20030425			
WO	2003	09258	36		A3		2004	916										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	ΤZ,	
	UA, UG, US		US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
CA	2483	752			Al		2003	1113	(CA 20	003-2	2483	752		20	00304	125	
ΑU	2003231114			A1 200311			1117	1	AU 20	003-2	2311:	14		2003.0425				
ΕP	2 1501507 A2			A2		2005	0202]	EP 20	003-1	72424	11		20	00304	125		
	R: AT, BE, CH,		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		

GI

NZ 5364	77	Α	20050527	NZ	2003-536477		20030425
JP 2005!	523929	T	20050811	JР	2004-500771		20030425
JP 3780	291	B2	20060531				
ZA 2004	007940	Α	20060628	ZA	2004-7940		20041001
PRIORITY APP	LN. INFO.:			US	2002-376180P	P	20020429
				WO	2003-US12929	W	20030425
OTHER SOURCE	(S):	MARPAT	139:381470				

AB Title compds. I (X = O, S, SO2, CR11R12, etc.; R1 = OH, (un)substituted alkyl, alkyloxyalkyl, Ph, heterocycle, etc.; , R2 = H, OH, halo, CN, heterocycle, (un) substituted alkyl, etc.; R3 = O or absent; R4 H, alkyl, F3C, F3CO, C1, Br, F, and Ph; R5 = F, C1, Br, CN, (un) substituted alkyl, thioalkyl, etc.; R6 = H, alkyl, F3C, F, Cl, Br; R7 = H, (un)substituted alkyl; R8 = H, OH, F, (un) substituted alkyl, or R7 and R8 may joined to from a carbocycle or heterocycle, etc.; R9 = H, OH, (un) substituted alkyl, alkyloxy, carboxylate, or R8 and R9 may together from a carbocycle or heterocycle, etc.; R10 = H, F, cycloalkyloxy, (un)substituted alkyloxy, alkyl, or R8 and R10 may together form a 5-6 membered (un)substituted ring; R11 and R12 = independently H, OH, (un) substituted alkyl, benzyl, cycloalkyl, etc.; n = 0-2) and their pharmaceutically acceptable salts were prepared and disclosed as modulators of chemokine receptor activity. Thus, II was prepared by condensation of tetrahydro-4H-pyran-4-one with the corresponding amino cyclopentyl precursor (preparation given). In particular, these compds. are useful as modulators of the chemokine receptor CCR-2. I had activity in binding to the CCR-2 receptor generally with an IC50 of less than about 1 μ M.

I

IT 625097-14-5P 625097-40-7P

RN CN RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(claimed compound; preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity) 625097-14-5 CAPLUS

Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 624733-88-6 CAPLUS

CN D-erythro-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 624733-89-7 CAPLUS

CN D-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1-methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

IT 624733-90-0P

RN

CN

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of tetrahydropyranyl cyclopentyl tetrahydropyridopyridines as modulators of chemokine receptor activity) 624733-90-0 CAPLUS

L-threo-Pentitol, 1,5-anhydro-2,3-dideoxy-3-[[(1R,3S)-3-[[7,8-dihydro-3-(trifluoromethyl)-1,6-naphthyridin-6(5H)-yl]carbonyl]-3-(1methylethyl)cyclopentyl]amino]-4-O-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> d his

L1

(FILE 'HOME' ENTERED AT 09:55:03 ON 04 OCT 2007)

FILE 'REGISTRY' ENTERED AT 09:55:23 ON 04 OCT 2007 STRUCTURE UPLOADED 6 S L1

L2

10/577,584

L3 74 S L1 FULL

FILE 'CAPLUS' ENTERED AT 09:55:55 ON 04 OCT 2007 L4 8 S L3

=> d 11

=>

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.